

EMSC

Update

**New York State Department of Health
Bureau of Emergency Medical Services**

Emergency Medical Services for Children Update

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New York State EMSC Develops Prehospital Care Reference Card on Children with Special Health Care Needs

The New York State EMSC Advisory Committee has been busy developing another reference card for prehospital care providers. This card will focus on children with special health care needs, particularly those who are dependent on medical technology. More children with special health care needs than ever before are able to live and be cared for at home due to advances in medical technology. Prehospital care providers will find themselves having to respond more frequently to emergency calls involving these children and must be prepared to provide

appropriate, effective, and confident care.

The reference card will focus mainly on the needs of children who are assisted by the most commonly encountered medical technology. The reference card emphasizes the need for prehospital providers to listen to the parents/caregivers for information and guidance since they know the special needs of their child the best.

Prehospital providers are most likely to encounter children with tracheotomies, including those who may be connected to ventilators. The reference card guides providers through some of

the most likely medical problems to be encountered with children using this equipment and how to assess and treat them.

The card also provides guidance on how to assess and treat pediatric patients experiencing problems with gastrostomies which involve the use of feeding tubes for total or enhanced feeding and/or the administration of medication. In addition, guidance is provided on problems with central intravenous catheters, colostomies or ileostomies, and cerebral spinal fluid shunts.

For each of these medical devices, an

explanation is given for its use, along with descriptions of the types of the devices available, assessment issues, and guidelines for treatment specific to BLS and ALS.

The card is currently in the final stages of development and approval for printing and release. It is expected to be available to EMS providers early in the spring of 2003.

Statewide Report on Pediatric Trauma to be Released

The Bureau of Emergency Medical Services is pleased to announce the upcoming release of a New York State Department of Health report entitled, *The New York State Trauma System: A Special Report on Pediatric Trauma*. The development of the report was a special project of the Bureau of EMS EMSC program in collaboration with the SUNY at Albany, School of Public Health. Funding for the project was provided, in part, by the federal Health Resources and Services Administration, Maternal and Child Health Bureau, Emergency Medical Services for Children Program.

With input from the NYS EMSC Advisory Committee, the report focuses on characterizing the pediatric trauma population captured in the statewide Trauma Registry. It includes pediatric trauma patients from 1994 – 1998, aged 0-19 yrs.

As a first step in an effort to shed some light on this special population, the report focuses solely on answering basic questions such as the total number of pediatric trauma patients statewide and in designated trauma regions, age and gender breakdowns, mechanisms of injury, the number treated at Regional or Area Trauma Centers, and the number of transfers. In addition, the report includes an appendix, which provides the same basic breakdowns by trauma region.

The Bureau expects the report to be of great interest to a variety of stakeholders including trauma care programs, prehospital and emergency care services, hospital administrators, injury prevention practitioners, and families. The Bureau, in collaboration with the SUNY at Albany, School of Public Health, plans to pursue additional analyses

of pediatric trauma data from the statewide Trauma Registry during 2003-2004 to further explore what is happening with pediatric trauma patients, including systems issues. The report is expected to be released in early 2003.



If you are a current training officer in a NYS certified EMS agency or a NYS Course Sponsor and have not received a copy of the new *NYS Pediatric Prehospital Care Course, A Continuing Education Course for EMT-Bs*, please call the EMSC program to request a copy on CDROM at (518) 402-0996, ext. 1,4.

Are Families Prepared for Medical Emergencies Involving Their Child?

This is the topic that an upcoming EMSC program brochure will address by providing guidance to families on what they can do to prepare themselves for a medical emergency involving their child. For example, did you know that there are areas of New York State that are not covered by 911? If someone you know lives in one of these areas, does he or she know what number to call in the event of a medical emergency?

The brochure offers many useful tips for preparing for a medical emergency before one ever takes place. Other examples include making sure your house number can be easily seen from the street day or night, that directions to your house are written down for caregivers to give an emergency dispatcher, and taking a first aid or CPR course.

In addition, a separate section of the brochure is devoted to preparedness tips for families with children with special health care needs. Pre-planning such as meeting with school nurses or

administrators to discuss having a medical emergency plan in place, or meeting with your local emergency medical services agency to inform them where you live and about your child's condition prior to any medical emergency, are just two of the many suggestions given.

Plans for disseminating the brochure include mailings to EMS agencies, pediatricians' offices, family practitioners' offices, and hospital emergency rooms. It is expected to be available to the public in the spring of 2003.



Poison Education, from Bleach to Bioterrorism

The previous issue of *EMSC Update* included an excellent article about a new, largely unfamiliar resource: the new national toll-free Poison Control phone number. This number, 1-800-222-1222,

when dialed from anywhere in the United States, will automatically route the caller to the nearest Poison Control Center. Contacting the *nearest* Poison Center means reaching the specialists who are most familiar with local poisons, toxicologists and treatment centers.

Although most are familiar with the poison emergency services available through this new hotline, many are unaware of another valuable resource Poison Centers offer: FREE education programs and materials. Poison Centers have long recognized the need to be proactive. While a poisoned patient may or may not be saved, 100% of prevented exposures have successful outcomes. Education, therefore, is a priority for all Centers. Your Poison Center will send you literature, stickers, coloring books, magnets...whatever it takes to prevent a poisoning. We also offer free, customized poison safety programs at your location. Just call the Poison Center and a professional, trained Poison Educator will provide your organization with training on any poison-related subject,

from childproofing the home to toxicology basics. The Hudson Valley Poison Education Center (HVPEC) is one of the six Poison Centers in New York State. HVPEC is the education resource for a 24-county coverage area that includes the Hudson Valley, Northern Region and Capital District. Like other Centers, HVPEC offers free brochures, magnets and other materials.

However, The Hudson Valley Poison Center has also developed several unique programs addressing potential terrorism-related poisons. Shortly after the September 11 attacks and subsequent Anthrax scare, HVPEC recognized the need for accurate, up-to-date Bioterrorism education for professionals and the public. In response, the educators at HVPEC created interactive PowerPoint programs designed to provide thorough, cutting-edge training about Nuclear, Biological and Chemical poison issues, free of charge. In response to the demand for its NBC education, HVPEC has created a subdivision called the Center for Terrorism Education (CTE). CTE is dedicated to becoming a leading

resource for Bioterrorism education. HVPEC is the *only* Poison Center in the nation currently offering public BT training.

To reach your local Poison Center, call 800-222-1222. For more information about the Hudson Valley Poison Center's education programs, call (914) 366-3675 or send an e-mail to PoisonEducation@yahoo.com.

*- Submitted by
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Center*



Training in Mandated Reporting for Child Abuse/Neglect for EMS Providers

Violence against
children, specifically in the

area of child maltreatment, is a public health concern that has reached epidemic proportions. Prehospital emergency medical services providers often are eyewitnesses to the scenes of child abuse and neglect, and through their trained eyes can be essential in identifying violence in the home, school and other locations. Through proper knowledge and education, prehospital providers' unique access can be used to enhance the safety of children.

The Center for Pediatric Emergency Medicine has performed a national assessment of emergency medical services providers' knowledge of possible signs and symptoms of abuse or neglect; their self-efficacy and attitudes toward their role in recognition and management; and their knowledge of proper identification, documentation and reporting. The results of this assessment served as the basis for a National Consensus Conference and Recommendations for EMS' Role in Child Protection.

As a follow up to these steps, the Center for Pediatric Emergency Medicine is now in the final stages of developing a training curriculum for

prehospital providers' role in child protection which will serve as a national model. It will contain sections applicable to each state's unique set of laws pertaining to prehospital providers' roles and responsibilities. An early version of the course was introduced to EMS providers at New York State's Vital Signs Conference in October 2002 and was presented by Drs. David Markenson and Arthur Cooper. The Center for Pediatric Emergency Medicine is taking additional steps to further modify the course for use with New York State prehospital providers.

The course will closely follow the format of the one provided to other New York State mandated reporters, but will reflect the unique role, perspectives, and responsibilities of prehospital providers. In addition, input continues to be sought from representatives of the state's Emergency Medical Services regions in the course review process. Lastly, the course will feature lectures, case discussions, and interactive discussions, and will be two hours in length. It is expected to be available on CDROM in 2003.

For any questions on the course, please contact Karen Caravaglia, Executive Director of the Program for Pediatric Preparedness at the Children's Hospital at Montefiore at (718) 920-7944 or Marsha Treiber, Executive Director of the Center for Pediatric Medicine, at (212) 562-4470.



Mid-Atlantic EMSC Region Plans Next Regional Symposium

Pending a notice of grant award from the federal Health Resources and Services Administration, the Mid-Atlantic EMSC Region is making plans to hold its annual EMSC symposium in early June 2003. Mid-Atlantic EMSC Region member state/district, Washington, D. C., has applied for the annual

regional EMSC symposium grant with the support of all of the Mid-Atlantic EMSC Region states.

Preliminary plans for the symposium include a one-day preconference offering courses for continuing medical education credits, and two days of workshops. Each EMSC Coordinator in the region will identify and invite several EMSC stakeholders to attend. Member states are: New York, New Jersey, Delaware, Pennsylvania, Virginia, Washington, D.C., and West Virginia.

AAP Course in Prehospital Pediatrics Makes Provision for PALS Credits

The American Academy of Pediatrics (AAP), Division of Life Support has recently announced that it has come to an agreement with the American Heart Association to grant *Pediatric Advanced Life Support (PALS)* course renewal credits to prehospital providers who take the AAP course, *Pediatric Education for Prehospital Professionals*, commonly known as *PEPP*, as long as the course follows certain

provisions. In order for a *PEPP* course to also qualify for *PALS* renewal credits, the *PEPP* course coordinator must offer the 2-day *ALS PEPP* course and adhere to the following:

- 1) A *PALS* Course Director must supervise instruction and testing;
- 2) The *PEPP* course coordinator must register the course with their Training Center;
- 3) Participants must have a current *PALS* provider card;
- 4) Participants must have access to the current *PALS* Provider Manual before, during, and after the course;
- 5) The current *PALS* pretest should be distributed to all students at least one week prior to the course, and the completed pretest should be brought to the class;
- 6) A score of at least 84% is required on the *PALS* post-test to pass;
- 7) *PALS* practical evaluation stations must be completed;
And
- 8) the *ALS PEPP* course and *PALS* Course Renewal must be completed in 2 days.

For questions or clarification on these requirements, please contact Jeff Hummel, RN, EMT-I, PEPP Manager, AAP Division of Life Support Programs, at 1-800-433-9016, ext. 4324 or e-mail him at jhummel@aap.org.



***PEPP* Renewal Course Options Announced**

EMS providers now have access to two renewal options to help keep their *PEPP* Course Completion cards up to date. Option 1 allows for online renewal. This is accomplished by completing the interactive online Pediatric Respiratory Emergencies module, refreshing your pediatric skills with a local *PEPP* Course Coordinator, and then retaking the original *PEPP* Course final

exam. Option 2 offers an on-site classroom renewal course. There are two steps involved in this course. Step 1 requires the completion of a half-day on-site refresher covering the most important material presented in the original *PEPP* Course and the new skill stations from the Pediatric Respiratory Emergencies module. Step 2 requires that the original *PEPP* Course final exam be retaken after completing the on-site refresher and hands-on skill stations.

For more information, visit the AAP website for *PEPP* at www.peppsite.com.

PEDNET Makes Strides at One-Year Anniversary

PEDNET, or Pediatric Emergency Department North East Team of the northeast region EMSC collaborative research infrastructure has recently completed its first year of operation. PEDNET is one of four designated sites around the country established as part of the EMSC- Pediatric Emergency Care Applied Research Network (PECARN) Network Development Demonstration Program (NDDP). PEDNET has reached a number of

milestones to mark its first year. There are now a number of active projects underway, scientific publication has been accepted in the peer-reviewed literature, and a well-oiled research machine now exists. PEDNET is led by Principal Investigator Nadine Levick, MD, MPH, of Harlem Hospital with an affiliation to Columbia University. The PECARN-NDDP is funded by the federal Health Resources and Services Administration (HRSA) of the Department of Health and Human Services (DHHS).

The goal of PEDNET is to create a northeastern regional network that fosters and conducts multi-institutional research in emergency medical services for children across diverse demographic populations, varied geographical regions, and that involves both children's and non-children's hospitals. PEDNET works collaboratively with PECARN and with the Central Data Management Center in Utah, and the other three EMSC Network Development Project (NDDP) Regional Nodes across the nation. In addition to research, PEDNET provides

opportunities for bi-directional education and exchange of ideas, information, and values between the academic, clinical, and public health practice environments.

PEDNET is supported by a \$1.8 million award provided over a three-year period. It bridges eight Hospital Emergency Department Affiliates (HEDAs), several major universities in the New York City, New York State and New Jersey areas, and encompasses more than forty investigators who make up the academic fabric of the PEDNET network. With its eight HEDAs, PEDNET is the largest of the four regional nodes of the national PECARN infrastructure.

Collectively, PEDNET cares for approximately 300,000 pediatric Emergency Department patients each year. There are seven Level 1 Pediatric Trauma Centers, three burn centers and two 23-hour observation units within PEDNET. The payor mix is 34% Medicaid, 39% other insurance, and 17% self pay. The PEDNET investigators' expertise covers a wide spectrum of pediatric emergency care and academic activity. The hospitals involved in PEDNET are:

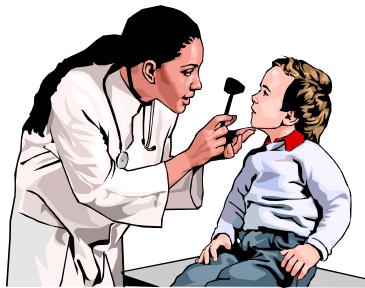
- Harlem Hospital Center, New York, NY
- Children's Hospital of New York, NY
- Bellevue Hospital Center, NY
- Children's Hospital of Buffalo, NY
- St. Barnabas Medical Center, NJ
- Upstate Medical Center, Syracuse, NY
- Morristown Children's Medical Center, NJ, and
- University of Rochester Medical Center, NY.

PEDNET's network of investigators hail from:

- Columbia University
- New York University
- University of Rochester
- SUNY Upstate Medical University, and
- SUNY University at Buffalo.

PEDNET has recently welcomed some new members and has bid farewell to one esteemed colleague. Dr. Jim Tsung has joined PEDNET as Harlem's Site Co-PI. This year, in addition to its eight established Hospital Emergency Department Affiliation (HEDA) sites, PEDNET has been joined by Lincoln Hospital, led by the Lincoln Hospital Site PIs, Dr. Orlando Peralis and Dr. Gerard Devas. Another newcomer to PEDNET is Dr. Jim Callahan, from SUNY Upstate Medical

University in Syracuse. PEDNET bids a fond farewell to Dr. Kathleen Brown, a highly esteemed member from Syracuse, who has relocated to Washington DC. She will join the DC PECARN site. Kathy and her outstanding contributions to PEDNET will be missed by all. Dr. Jim Callahan, will serve as Dr. Brown's replacement as the Site PI for SUNY Upstate Medical University.



In other news, PEDNET will host PECARN's next quarterly national meeting which will include all four Regional Nodes, the Central Data Management Center, and federal EMSC/MCHB partners. The meeting will take place in New York City, April 11-12, 2003.

About PECARN

The Pediatric Emergency Care Applied Research Network (PECARN) is dedicated to

improving health care for ill and injured children. PECARN will perform meaningful and rigorous multi-institutional research into the prevention and management of acute illnesses and injuries in children representing diverse demographic populations and geographic regions in order to promote their health in all phases of care. In addition, PECARN provides the leadership and infrastructure needed to support research collaboration among EMSC investigators and to foster informational exchanges between EMSC investigators, providers, and the communities they serve in order to significantly improve EMSC care delivery.

Toward that end, PECARN-wide implementation is underway which includes the following research projects:

- 1) PECARN Core Data Project – to establish and test an Emergency Department-based data collection and surveillance system in all Emergency Departments within PECARN;
- 2) Childhood Head Trauma: A Neuroimaging

Decision Rule – to identify the evidence on which to base appropriate emergency department evaluation of head-injured children;
and

- 3) Effect of Hypothermia on Outcomes of Pediatric Cardiopulmonary Arrest – to study the effects of mild controlled hypothermia following pediatric cardiopulmonary resuscitation on patient hospital survival and neurological outcome.

Both the childhood head trauma research proposal and the proposal involving hypothermia have been submitted for federal RO1 funding.

Additional proposals under development by PECARN include:

- Use of steroids in bronchiolitis;
- Profile of psychiatric presentations to pediatric emergency departments; and

- Use of ultrasound in blunt trauma.

- Submitted by Nadine Levick, MD, MPH, Principal Investigator for PEDNET and Director of Pediatric Emergency Medicine, Harlem Hospital Center

**National School
Health Guidelines
Released**

The Centers for Disease Control and Prevention (CDC) have recently released school health guidelines to prevent unintentional injuries and violence. The guidelines identify school policies and practices that are most likely to be effective in preventing unintentional injury, violence, and suicide among youth. Guidelines are broken down by the following categories:

- social environments that promote safety,
- safe physical environments,
- health education curricula and instruction,
- safe physical education,
- sports and recreational activities,
- health, counseling, psychological and social services for students,
- appropriate crisis and emergency response,
- involvement of families and communities, and
- staff involvement to promote safety and prevent

unintentional injuries, violence and suicide.

The full report is published in the December 7, 2002 issue of *CDC's Morbidity and Mortality Weekly Report Recommendations and Report series (RR#22)*. It can also be downloaded at www.cdc.gov/mmwr. For additional information, contact the CDC's Division of Adolescent and School Health at 1-888-231-6405 or send e-mail to HealthyYouth@cdc.gov.

CHILD SAFETY FACT:

When an adult buckles up, children are buckled up 87% of the time.

When a driver is unbuckled, only 24% of children are restrained.

Is Your Ambulance Adequately Equipped to Care for Pediatric Emergencies?

The National EMSC Program has developed recommendations for emergency medical services agencies on what equipment to carry on an ambulance in order to be well prepared for

emergencies involving children.

For BLS ambulances, the following minimum equipment list is recommended:

Oropharyngeal airways: infant, child, adult (sizes 00-5);

Self-inflating resuscitation bag: infant, child and adult sizes;

Masks for bag-valve-mask device: neonatal, infant, child, and adult sizes;

Oxygen masks: infant, child, and adult sizes;

Nonbreathing masks: pediatric and adult sizes;

Stethoscope;

Backboard;

Cervical immobilization device (wedges, collars, etc., but not sandbags): infant, child, adolescent, and adult sizes;

Blood pressure cuffs: infant, child, and adult sizes;

Portable suction unit with regulator;

Suction catheters: tonsil-tip and 6F-14F;

Extremity splints: pediatric sizes;

Bulb syringe;

Obstetric pack;

Thermal blanket; and

Water-soluble lubricant.

For ALS ambulances, flycars/first response vehicles, the following minimum equipment and supplies are recommended:

Transport monitor;
Defibrillator with adult
and pediatric paddles;
Monitoring electrodes:
pediatric sizes:
Laryngoscope with
straight blade sizes 0-2 and
curved blades 2-4;
Endotracheal tube
stylets: pediatric and adult
sizes;
Endotracheal tubes:
uncuffed sizes 2.5-6.0 and
cuffed sizes 6.0-8.0;
Magill forceps:
pediatric and adult;
Nebulizer;
Intraosseous needles;

Length/weight-based
IV catheters: 16-24 gauge;
Pediatric drug dose chart
or tape (e.g., Broslow
Tape);
Needles 20 to 25 gauge;
and
Resuscitation drugs and
IV fluids that meet the
local standards of practice.

For any questions
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